



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,737	04/09/2004	Jong-eun Chae	1572.1290	9002

21171 7590 08/24/2006

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

EARLY, MICHAEL JACOBY

ART UNIT	PAPER NUMBER
----------	--------------

3744

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No. 10/820,737	Applicant(s) CHAE ET AL.	
	Examiner Michael J. Early	Art Unit 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-16 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Park et al. (U.S. 5,664,437).

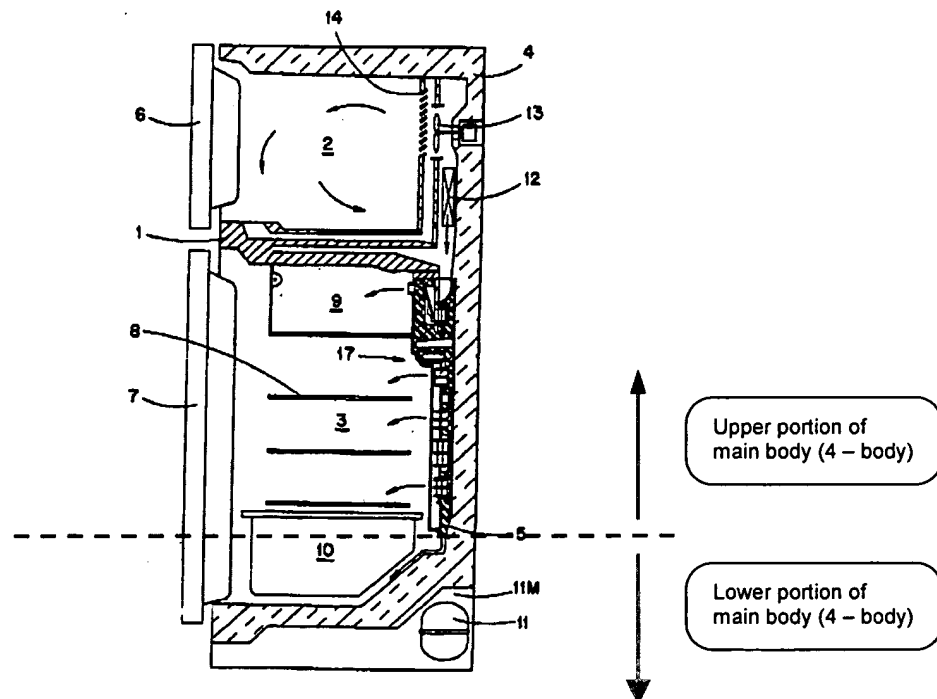
Regarding claims 1-11, Park et al. disclose:

- a main body (4 – body) formed with a storing compartment (3 – refrigerator compartment) (as seen in Figure 4);
- a first cool air duct (middle portion of 25 – cool-air duct) provided in a rear of the main body (see col. 5, lines 19-25; Figure 6);
- a lamp unit mounted in an upper part of the main body (as seen in the illustration of Figure 4 below) and comprising a lamp (30 – indoor lamp) and a lamp case (31 – lamp cover) (as seen in Figures 4, 6);
- a second cool air duct (lower portion of cool-air duct [25]; col. 5, lines 19-25) that is formed in an upper part of the lamp case to communicate with the first cool air duct (as seen in Figure 6) and allows cool air flowing through the first cool air duct to flow out toward a front of the storing compartment of the main body (in an indirect manner);
- the second cool air duct is formed in the lamp case as one body (as seen in Figure 6);
- the second cool air duct is detachably formed in the lamp case (as seen in Figure 6);
- an insulating member in the second duct (see col. 5, lines 33-37);

Art Unit: 3744

- the second cool air comprises an upper case (24 – front cover) and a lower case (34 – seal plate) engaged to each other (depending on your perspective);
- the lower case comprises an insulator (see col. 5, lines 33-37);
- an air chamber (15 – cool-air passage) located at a front of the lamp unit (depending on your perspective) and coupled to the second cool air duct (as seen in Figures 6, 9A);
- wherein the cool air from the second cool air duct is discharged through the air chamber to the front of the storage compartment (in an indirect manner) and the air chamber includes a discharge grate (16A, 16B, 16C – cool-air discharge openings) to disperse the cool air evenly across the front of the storage compartment (in an indirect manner).

FIG. 4



Art Unit: 3744

Regarding claims 12-16 and 18-20, Park et al. disclose:

- a main body (4 – body) housing a plurality of refrigeration components (11 – compressor, 11M – machine compartment, condenser and pressure reducing device, 12 – evaporator; col. 4, lines 64-67; col. 5, lines 1-16) and a climate controlled storage compartment (9 – third compartment) that includes an opening selectively covered by a door (7 – refrigerating compartment door) (as seen in Figures 4, 5);
- a lamp unit (see col. 5, lines 41-44) mounted above the storage compartment (as seen in Figures 5, 6);
- a cool air duct (25 – cool-air duct) contiguous with the lamp unit (as seen in Figure 6) wherein the cool air flowing from the plurality of refrigeration components is discharged to a front of the storage compartment by the cool air duct (in an indirect manner);
- an air chamber (15 – cool-air passage) located at a front of the lamp unit (depending on your perspective) and coupled to the cool air duct (as seen in Figures 6, 9A);
- wherein the cool air from the cool air duct is discharged through the air chamber to the front of the storage compartment (in an indirect manner);
- the cool air duct comprises a lower air duct (lower portion of cool-air duct [25]; col. 5, lines 19-25) and an upper air duct (middle portion of cool-air duct [25]; col. 5, lines 19-25) coupled together and demountably combined with the lamp unit (as seen in Figure 6);
- the lower air duct is insulated (see col. 5, lines 33-37);
- the lower air duct is formed of insulating material (see col. 5, lines 33-37);
- insulation is disposed between the lower duct and the lamp unit (see col. 5, lines 33-37);
- an air chamber located at a front of the lamp unit (depending on your perspective) and coupled to the cool air duct (as seen in Figures 6, 9A);

Art Unit: 3744

- wherein the cool air from the cool air duct is discharged through the air chamber to the front of the storage compartment (in an indirect manner);
- the air chamber includes a discharge grate (16A, 16B, 16C – cool-air discharge openings);
- the climate controlled storage compartment comprises another cool air duct (23 – air discharge opening) that is mounted at a rear thereof and in communication with the cool air duct (as seen in Figures 4, 5).

With regards to those limitations that are functional recitations, a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the *structural* limitations of the claimed.

Response to Arguments

Applicant's arguments filed 6/7/06 have been fully considered but they are not persuasive.

Applicant argues that Park et al. do not disclose a second cool air duct that allows cool air to flow towards a front of the storing compartment. This argument is not persuasive. Although the outlet ports and air discharged from the second cool air duct (lower portion of cool-air duct [25]) are directed to the rear of the refrigerating compartment [3], the air that is initially discharged is indirectly sent to the front of the refrigerating compartment. This limitation is met because the discharged air is not bound to the rear of the compartment and as more air is circulated, a portion of the air is forced towards the front of the compartment. Thus, the rejection is valid and remains.

Applicant argues that Park et al. do not disclose an air chamber that is located in front of the lamp unit and discharges cool air to the front of the storage compartment. This argument is not persuasive. The front of the lamp unit has not been declared; therefore

Art Unit: 3744

the front of the lamp has been defined as facing the rear of the refrigerating compartment [3]. In addition, although the air chamber [15] is facing the rear of the refrigerating compartment [3], the air that it discharges does flow towards the front of the refrigerating compartment [3] in an indirect manner, as discussed in the previous paragraph. Thus, the rejection is valid and remains.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Early whose telephone number is (571) 272-3681. The examiner can normally be reached on Monday - Friday, 7am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

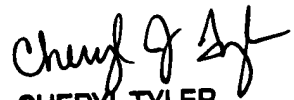
Art Unit: 3744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJE
8/14/06

Michael J. Early
Patent Examiner
Art Unit 3744




CHERYL TYLER
SUPERVISORY PATENT EXAMINER